

Before the  
Federal Communications Commission  
Washington, D.C.

In the Matter of: )  
 )  
Amendment of the Commission's Rules Governing ) WT Docket No. 07-250  
Hearing Aid-Compatible Mobile Handsets )

**COMMENTS OF:**

**HEARING LOSS ASSOCIATION OF AMERICA;  
TELECOMMUNICATIONS FOR THE DEAF AND HARD OF HEARING, Inc.;  
ASSOCIATION OF LATE-DEAFENED ADULTS, Inc.;  
DEAF & HARD OF HEARING CONSUMER ADVOCACY NETWORK;  
NATIONAL ASSOCIATION OF THE DEAF; and  
ALEXANDER GRAHAM BELL ASSOCIATION FOR THE DEAF  
AND HARD OF HEARING**

Hearing Loss Association of America ("HLAA"), Telecommunications for the Deaf and Hard of Hearing, Inc. ("TDI"), Association of Late-Deafened Adults, Inc. ("ALDA"), and Deaf & Hard of Hearing Consumer Advocacy Network ("DHHCAN"), National Association of the Deaf ("NAD"), and Alexander Graham Bell Association for the Deaf and Hard of Hearing ("AG Bell") (collectively, "Consumer Groups") submit these comments in response to the Further Notice of Proposed Rulemaking<sup>1</sup> ("FNPRM") released by the Federal Communications Commission ("FCC" or "Commission") on August 5, 2010 regarding the hearing aid compatibility rules:

1. The Commission proposes to extend the scope of the rules beyond the current category of commercial mobile radio services ("CMRS") to include handsets used to provide wireless voice communications over any type of network among members of the public or substantial portion of the public. It also seeks comment on what transition period is appropriate for applying the requirements to newly covered handsets.
2. The Commission seeks further comment on whether to extend in-store testing requirement beyond retail stores owned or operated by service providers to some or all other retail outlets.
3. The Commission seeks comment on whether to extend to all circumstances the ability to meet hearing aid compatibility radio frequency ("RF") reduction

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<sup>1</sup> Amendment of the Commission's Rules Governing Hearing Aid Compatible Mobile Handsets, WT Docket No. 07-250, *Policy Statement and Second Report and Order and Further Notice of Proposed Rulemaking* (Aug. 5, 2010) ("FNPRM").

standards for GSM operations in the 1900 MHz band through software that enables the user to reduce maximum power output by up to 2.5 dB.

#### **A. Extension of Hearing Aid Compatibility Rules to New Technologies and Networks**

##### **FNPRM, Paragraph 77**

The Commission proposes that “hearing aid compatibility requirements should apply to all customer equipment used to provide wireless voice communications over any type of network among members of the public or a substantial portion of the public via a built in speaker where the equipment is typically held to the ear so long as meeting hearing aid compatibility standards is technologically feasible and would not increase costs to an extent that would preclude successful marketing.”<sup>2</sup>

Consumer Groups agree. We believe that hearing aid compatibility rules should apply to all emerging wireless voice communications technologies. Consumers with hearing loss who use hearing aids, cochlear implants or other implantable hearing devices should not be left without access as new technologies and networks become available to the public.

The number of Americans with hearing loss is estimated to be 36 million.<sup>3</sup> This number is expected to increase in the coming years. People with hearing loss who use hearing aids or cochlear implants or other implantable hearing devices to hear on the phone need access to mobile phone services for work, for school, in the community, at home, and in emergency situations, just like every other American. But communication is a two-way street. The impact goes well beyond the person with a hearing loss, to those who live and work with people with hearing loss. If an employee is unable to communicate well with co-workers over a mobile phone, then the workplace loses valuable input from that employee. We are reminded that the House of Representatives Report stated upon the enactment of the Hearing Aid Compatibility Act that “the inability to use all telephones imposes social and economic costs on not only the hearing impaired, but the whole nation.”<sup>4</sup>

The Commission has made it clear in the Policy Statement released with this FNPRM that, “Consistent with Congressional intent to afford equal access to communication networks to the fullest extent feasible and longstanding Federal Communications Commission precedent, it is the policy of the Commission that our hearing aid compatibility rules provide people who use hearing aids and cochlear implants with continuing access to the most advanced and innovative technologies as science and markets develop.”<sup>5</sup> The Commission further articulated three principles, one of which is

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<sup>2</sup> FNPRM at ¶ 28.

<sup>3</sup> National Institute on Deafness and Other Communication Disorders, National Institutes of Health, “Quick Statistics,” available at <http://www.nidcd.nih.gov/health/statistics/quick.htm> (last visited Aug. 20, 2010).

<sup>4</sup> H.R. Rep. No. 100-674, at 7 (1988).

<sup>5</sup> FNPRM at ¶ 18.

for “developers of new technologies to consider and plan for hearing aid compatibility at the earliest stages of product design.”<sup>6</sup>

Time and again consumers have paid a price, waiting for access to devices well after those devices were made available to the public, because accessibility was not considered in the design stages. Presently, new technologies are being introduced at a rapid pace, sometimes surpassing handsets that are barely a few years old. Under these conditions, we are concerned that if we wait as each new air interface, each new technology, each new innovation is created, vetted, standardized and only after the fact are solutions sought and found for accessibility, hearing aid compatible phones will only be available in legacy technologies, or perhaps not at all if these old technologies are displaced from the market.

Consumer Groups most certainly support innovation. Technological innovations can and do help people with disabilities. Innovative engineers have developed technology to provide access for many devices. We are convinced that these engineers can incorporate accessibility during the design stage of new technologies. But this effort will not take place if doing so is not part of their agenda. If industry’s primary concern is the appearance of a device or “fashion,” experience tells us that without regulations compelling a different approach, designing to “fashion” will leave devices inaccessible. This is the reason that Congress enacted into law the requirement to provide access. It is just when the perceived marketplace puts pressure on industry to turn away from the needs of people with disabilities that the laws and regulations serve to establish that accessibility must be industry’s priority.

In our Reply Comments on Section 68.4(a) of the Commission Rules Governing Hearing Aid-Compatible Telephones, WT Docket 06-203 (January 31, 2007), HLAA noted:

Unless manufacturers are serious about incorporating accessible design at the outset, consumers with hearing loss will always be left behind. . . . It is critical that people with hearing loss have access to telephone services no matter what the air interface. HAC must be taken into consideration when designing phones that work with these new technologies, and evidence as to why it may or may not be feasible to incorporate such compatibility must be revealed. . . . We urge the FCC to require industry to ensure that people with hearing loss are not left behind as these and other new technologies continue to evolve.<sup>7</sup>

Consumers are not alone. Between 2003 and 2010, the ATIS HAC Incubator Solutions Group on Hearing Aid Compatibility (ATIS.4-HAC), a collaboration of industry, consumer and professional groups, worked toward common ground in ensuring that people with hearing loss have access to wireless technology. In 2007, they reported out a set of Principles to the FCC. Principle #7 states:

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<sup>6</sup> *Id.*

<sup>7</sup> HLAA Reply Comments at 4-5.

The wireless industry and advocates for consumers with hearing aids agree there is a need to refresh offerings of HAC devices. New technologies should also incorporate FCC HAC requirements to reflect advancements available in the mass market.

HLAA's position has not changed and Consumer Groups concur. It is critical that people with hearing loss have access to telephone services no matter what new technologies emerge.

#### **FNPRM, Paragraph 78, 81**

The Commission proposes to find that the scope of the Hearing Aid Compatibility Act broadly encompasses devices used to provide voice communication.<sup>8</sup> The Commission also proposes to find that this broad interpretation of the definition of telephone should include multi-use devices that can function as traditional telephones typically used by being held to the ear, but which may have other capabilities and serve additional purposes.<sup>9</sup>

Consumer Groups agree with the Commission. The wireless smart phone does not look like, and certainly has more functionality than, the landline rotary phone used years ago. But it still provides the same result for the end user: a way to provide voice communication. We cannot know whether the cutting edge smart phone of 2010 will look like the phone used in 2020 or even 2015. But if the device is commonly used like a telephone in that it provides voice communication, it should be treated as a telephone or telephone service for the purposes of the Hearing Aid Compatibility Act. To allow the type of technology, rather than the function, to define the telephone would be tantamount to restricting people with hearing loss to using obsolete technology.

We support the Commission's proposed interpretation of the definition of telephones to include multi-use devices.

#### **FNPRM, Paragraph 82**

The Commission proposes not to extend the rules to cover non-interconnected systems that are solely used for internal communications, such as public safety or dispatch networks.<sup>10</sup>

Consumer Groups are concerned that employees who use hearing aids or cochlear implants or other implantable hearing devices may be negatively impacted by not extending the rules to these networks. Such a rule would have an adverse impact on the employee who is required to use a mobile device to obtain or retain his or her job. Often those are the very devices that would be difficult or impossible to either retrofit, accessorize, or make compatible with assistive technology that make them useable for a person with a hearing loss. If, in fact, compliance with HAC rules for these types of systems would increase costs to such an extent that the burden on manufacturers would

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<sup>8</sup> FNPRM ¶ 78.

<sup>9</sup> FNPRM ¶ 81.

<sup>10</sup> FNPRM ¶ 82.

outweigh the public benefits, manufacturers should request a waiver on a case by case basis.

#### **FNPRM, Paragraph 85-86**

The Commission seeks comment on their proposal to establish a broad scope for hearing aid compatibility obligations that is not dependent on particular forms of network technology, in order to encourage manufacturers to consider hearing aid compatibility at the earliest stages of the product design process.<sup>11</sup> The Commission further proposes that a failure to extend hearing aid compatibility requirements broadly to handsets used for voice communications with members of the public or substantial portion of the public would have an adverse effect on people with hearing loss, including those operating over new and developing technologies.<sup>12</sup> The Commission also proposes to find that expanding the scope of the Commission's hearing aid compatibility requirements would serve the public interest.<sup>13</sup>

Consumer Groups agree with the Commission that the inability to access innovative technologies as they develop has an adverse effect on people with hearing loss who use hearing aids, cochlear implants or other implantable hearing devices. We also agree that a lack of hearing aid compatible handsets would have an adverse affect on people with hearing loss. Thirty years ago, Americans worked from 9 to 5, and left their work behind when they headed for home. Today, to be competitive in the workplace, individuals must be ready to communicate with their employer virtually 24/7, using their own or a company-issued handset. If the industry does not consider providing access at the time new technologies are being designed and developed, it is conceivable that these newer technologies may never incorporate accessibility for people with hearing loss. This would lead to barriers for employees with hearing loss to do their job. We have learned again and again that retrofitting is expensive if done at all. If innovators consider the impact of hearing aid compatibility from the early stages of design, they are more likely to find ways that consumers with hearing loss can access their products.

Therefore, Consumer Groups support the Commission's proposed rule that would provide that all customer equipment used to provide wireless voice technology should be required to be hearing aid compatible.

#### **FNPRM, Paragraph 89**

The Commission asks how the hearing aid compatibility rules should address circumstances where voice capability may be enabled on a handset by a party other than the manufacturer.<sup>14</sup>

AISP.4-HAC calls attention to the fact that neither manufacturers nor service providers have control over how a handset will function once a consumer installs after-market software applications. We agree that in cases where manufacturers or service providers

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<sup>11</sup> FNPRM at ¶ 85.

<sup>12</sup> *Id.*

<sup>13</sup> FNPRM at ¶ 86.

<sup>14</sup> FNPRM at ¶ 89.

have no control over software installed by consumers, they cannot be held accountable for the impact that software has on hearing aid compatibility.

However, should a situation arise whereby a license agreement or contract has been entered into between either the manufacturer or the service provider and a software developer or producer, that manufacturer and/or service producer must ensure that the software does not negatively impact the handset's hearing aid compatibility. Consumer Groups urge the Commission to ensure that whenever a manufacturer or a service provider does have such a license agreement or contract with a software developer or producer that such agreements include the assurance of hearing aid capability and that the manufacturer or the service provider be held responsible for ensuring hearing aid compatibility.

## **B. In-Store Testing for Independent Retailers**

### **FNPRM, Paragraph 95**

The Commission seeks comment on whether the in-store testing requirement should be extended to some or all retail outlets other than those owned or operated by service providers and whether, if the Commission does extend this requirement, it should be extended to all entities that sell handsets to consumers through a physical location.<sup>15</sup>

Consumer Groups urge the Commission to extend in-store testing to all retail outlets with a physical location whenever they provide activation services.

Some retail outlets have trained their staff to activate handsets before the purchaser leaves the store. These stores often provide this service for more than one handset and more than one service provider. Consumer Groups contend that a retail outlet that has the capacity to activate handsets can also provide for testing before sales so that anyone, particularly people who use hearing aids, cochlear implants, or other implantable devices can test the handsets before purchase.

The Commission requires manufacturers to provide a range of hearing aid compatible mobile handset models ranging from high end/high cost to low end/low cost. Without access to the full range of handsets, people who use hearing aids will not be able to “try before they buy.” People with hearing loss are therefore effectively shut out from the purchase of phones that may be less expensive precisely because they are offered at stores like Wal-Mart or Costco, or other large “box” stores that have the ability to negotiate lower pricing across the board.

However, Consumer Groups have found that some retail outlets do not provide in-store activation of a handset before the purchaser leaves the store. We note these stores simply sell the handsets in an unopened box. For those stores, the Commission may wish to consider whether or not to require in-store testing of handsets.

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<sup>15</sup> FNPRM at ¶ 95

### **FNPRM, Paragraph 96**

The Commission seeks comment on whether they should require independent retailers to allow a customer with hearing loss to return a handset without penalty, either instead of or in addition to an in-store testing requirement.<sup>16</sup>

Consumer Groups believe that both an in-store testing requirement and a flexible return policy are essential for consumers with hearing loss. In-store testing goes a long way to help a person determine instantly whether a particular handset is causing interference or is incompatible with a particular hearing aid. However, in-store testing will not reveal whether the handset will function equally well at home, at the office, or in noisy situations with different speaking voices. A flexible return policy of at least 30 days is needed to test the phone with the hearing device in addition to the spot check in the store. Another important consideration is that several service providers charge a “re-stocking fee” upon return of the handset. We believe this fee should be waived, so long as the cause for return was the fact that the handset was incompatible with the hearing aid or cochlear implant.

### **C. GSM Operations at 1900 MHz**

#### **FNPRM, Paragraph 99**

In the Second Report and Order released with this FNPRM<sup>17</sup> the Commission amends the rules so that a manufacturer or service provider that offers one or two handset models over the GSM air interface, which would not have to offer any hearing aid-compatible GSM models but for its size, may meet its hearing aid compatibility deployment obligation by offering one handset that allows consumers to reduce the maximum transmit power only for operations over the GSM air interface in the 1900 MHz band by up to 2.5 dB and that meets the criteria for an M3 rating after such power reduction. The Commission seeks comment on whether they should treat such handsets as hearing aid-compatible for all purposes.<sup>18</sup>

In a letter dated July 13, 2010 to the Commission, HLAA supported the proposed amendment to the rules to allow operations over the GSM air interface in the 1900 MHz band by up to 2.5 dB to meet the criteria for an M3 rating after such a power reduction.<sup>19</sup> It’s our understanding that, as a legacy 2G network, GSM is in the process of being supplanted by newer and more powerful technologies. In addition, the proposed revision of the ANSI standard C63.19 which would make it approximately 2.2 dB easier for a GSM phone to achieve an M3 rating has gone to ballot and is expected to be adopted.

Consumer Groups find we can support the Commission’s proposal to extend the same *de minimis* rule technical exception allowing a reduction in power for GSM operations in the 1900 MHz band to all manufacturers and service providers if the Commission reexamines

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<sup>16</sup> FNPRM at ¶ 96.

<sup>17</sup> FNPRM at ¶ 51-56.

<sup>18</sup> FNPRM at ¶ 99.

<sup>19</sup> See July 13, 2010 HLAA letter at 3.

this power relaxation for elimination or adjustment at the point that a new version of the C63.19 standard has been adopted.

Consumer Groups understand there is no data available that supports the contention that this power down will have a limited impact on consumers. If the Commission adopts this change, we urge the Commission to gather information from consumers, service providers and manufacturers specifically to determine whether consumers have been negatively impacted by this change in the rule. The Commission should also require that the rule be reviewed again in a timely manner, but no later than in two years (2012).

The Commission also seeks comment on their proposed finding that if they do extend the ability to meet hearing aid compatibility standards by allowing the user to reduce the maximum power for GSM operations in the 1900 MHz band, they would do so subject to the condition that the handset would have to operate at full power when calling 9-1-1, and the manufacturer or service provider would have to disclose that activation of a special mode is required to meet the hearing aid compatibility standard and must explain how to activate the special mode and the possibility of the loss of coverage in the device manual or product insert.<sup>20</sup>

Consumer Groups agree that these conditions are not only reasonable, but necessary. In fact, we would urge the Commission to require that both the manufacturer *and* the service provider to disclose the information about 9-1-1 operation. In addition, this information should not be hidden in the device manual but rather provided in a product insert in large print, plain language easily available to the consumer and understood by salespeople who can explain the information to consumers in the store or are available for on-line consultation. This information should also be required to be highlighted on the websites of both the manufacturer and the service provider. Again, Consumer Groups urge the Commission to gather data to determine whether this change in the rules results in any negative impact on consumers. We also urge a review of this condition of the rule within two years (2012).

### **FCC PN October 12, 2010**

The Commission issued a Public Notice October 12, 2010 requesting comments on how the Twenty-First Century Communications and Video Accessibility Act of 2010 affect the proposed rules.<sup>21</sup>

In our Comments herein, Consumer Groups state our contention that hearing aid compatibility rules should apply to all emerging technologies. The new Act specifically extends hearing aid compatibility requirements to customer premises equipment “used with advanced communication services that is designed to provide 2-way voice communications via a built in speaker intended to be held to the ear in a manner

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<sup>20</sup> FNPRM at ¶ 99.

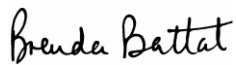
<sup>21</sup> *Wireless Telecommunications Bureau Requests that Comments in Hearing Aid Compatibility Proceeding Address Effects of New Legislation*, Public Notice, DA 10-1936, WT Docket No. 07-250 (Oct. 12, 2010),



functionally equivalent to a telephone.”<sup>22</sup> The new law ensures that any handset used with advanced communication services will be hearing aid compatible. It is in the public interest to ensure that new communication services are also accessible to people who use hearing aids or cochlear implants with their phone services. We urge the Commission to consider access to the advanced communication technologies in the same way it considers all emerging technologies, and apply hearing aid compatibility rules to handsets operating on these technologies.

The Consumer Groups appreciate the opportunity to submit comments on this important matter.

Respectfully submitted,



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<sup>22</sup> S. 3304, 111<sup>th</sup> Cong. Sec. 102 (as signed by President, Oct. 8, 2010); S.3828, 111<sup>th</sup> Cong. (as signed by President, Oct. 8, 2010)

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